

# Supplementary Materials for

## Three-dimensional porous $Ti_3C_2T_x$ -NiO composite electrodes with enhanced electrochemical performance for supercapacitors

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### Supporting Information

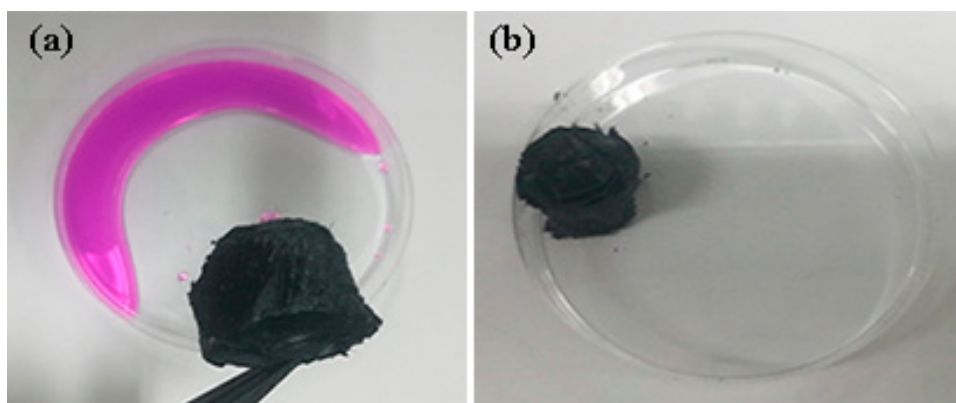
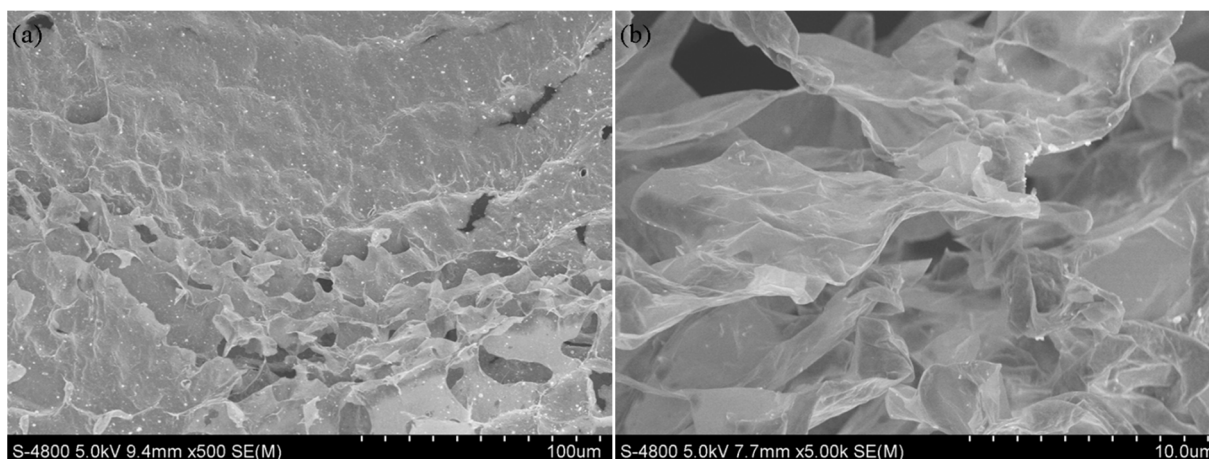
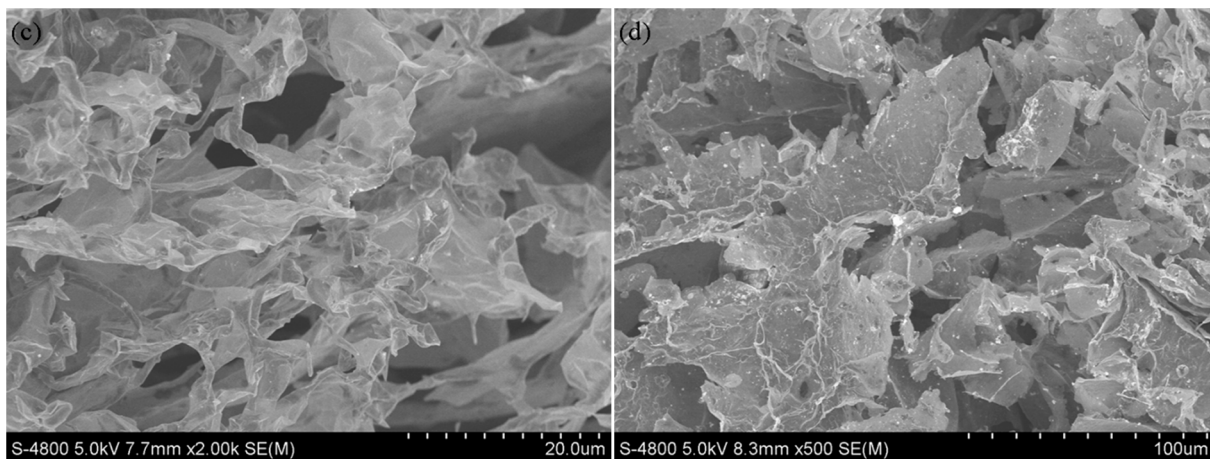
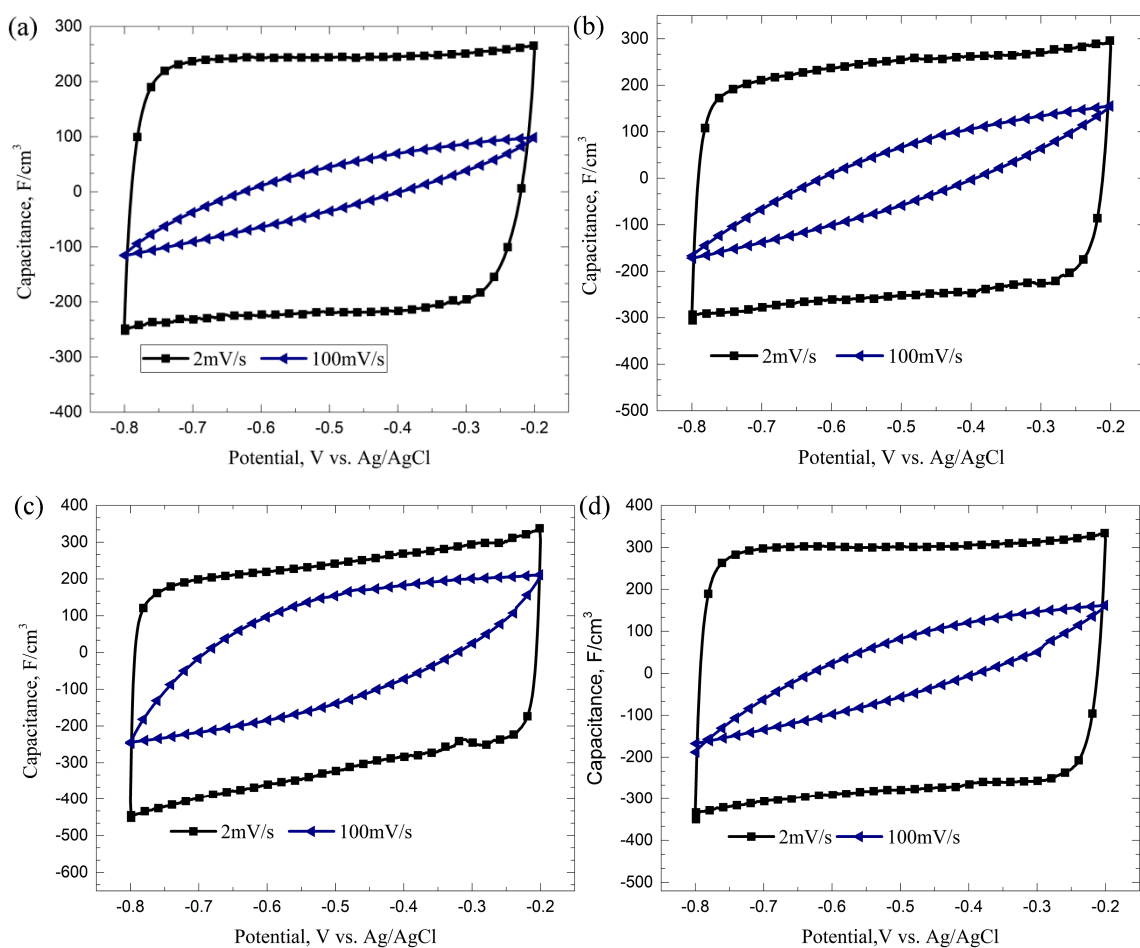


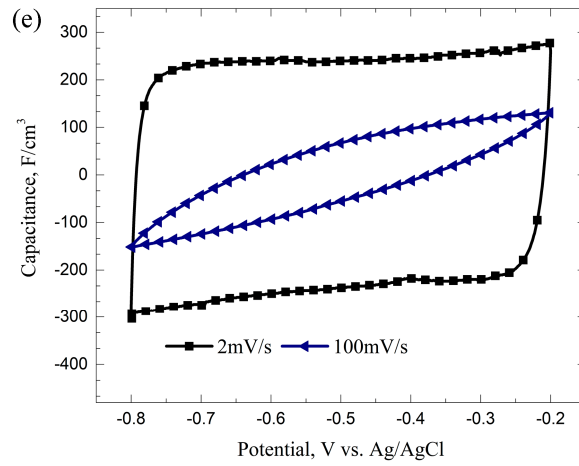
Fig. S1. The pictures for 3D porous  $Ti_3C_2T_x$  (a) before and (b) after absorbing water.





**Fig. S2.** SEM images of the (a) 3D porous  $Ti_3C_2T_x-NiO$  with initial ratio of 2:1, (b) 3D porous  $Ti_3C_2T_x-NiO$  with initial ratio of 1:1, (c) 3D porous  $Ti_3C_2T_x-NiO$  with initial ratio of 1:1, (d) 3D porous  $Ti_3C_2T_x-NiO$  with initial ratio of 1:2.





**Fig. S3.** CVs images of the (a) 3D porous  $Ti_3C_2T_x$  (b) 3D porous  $Ti_3C_2T_x-NiO$  with initial ratio of 4:1, (c) 3D porous  $Ti_3C_2T_x-NiO$  with initial ratio of 2:1, (d) 3D porous  $Ti_3C_2T_x-NiO$  with initial ratio of 1:1, (e) 3D porous  $Ti_3C_2T_x-NiO$  with initial ratio of 1:2.